ANGELL\*CONSERVATION BIOLOGY\*SPRING 2014

**Background**

For the past nine years we have hosted eight elementary classrooms a year to St. Olaf’s Natural Lands to learn about wetlands. The program takes advantage of St. Olaf’s 15 wetlands and 150 acres of restored prairie. The program began as a collaboration between myself, two St. Olaf Student Naturalists and the St. Olaf Environmental Coalition and was developed at the request of a teacher who realized cuts in funding were eating away at the science and environmental education programs that for many years had been a regular part of the curriculum. Although St. Olaf students and biology majors in particular have often volunteered in classrooms and as tutors, volunteering to host classes allows students to share our campus as well as their biology and environmental studies learning with second and fifth graders. Having to communicate biology and environmental issues to elementary students gives us a deeper understanding of the academic topics you all experience in the classrooms and labs on campus. Elementary students are exposed to hands on biology and environmental science in small groups with a college student.

**Why wetlands?**

Minnesota’s wetlands continue to be lost at a rapid pace and are often underappreciated. Despite their abundance in the area, elementary students often have difficulty understanding the role wetlands play in supporting natural communities and in managing water. In Minnesota, about half of our wetlands have been eliminated. As a community Northfield has initiated a number of efforts to improve water quality in the Cannon River as well as other local streams and wetlands. Recent community discussions about trade-offs between development and water quality mean wetlands and water issues in general are topics relevant to kids. Understanding wetlands is critical to the future preservation of these ecosystems.

**Curriculum**

Kids currently spend less time outdoors interacting with wild natural communities than ever before in our history. Many children are uncomfortable touching and handling small organisms or are concerned about getting dirty. Many of the outdoor experiences they do have are not focused on science exploration. One of our primary goals is for students to have positive outdoor science experiences during their visit to campus.

Biology and science learning in general is considered increasingly important as our country focuses broadly on increasing participation in the STEM disciplines (Science, Technology, Engineering and Math). Many students think of science as something only done in the classroom. Bringing students outside to learn and explore science issues leaves them with a very different impression of what science is and what scientists do.

**What are you going to do?**

Your project will involve a “product” that will be made available to support this effort to work with third and fifth graders on understanding our local wetlands. Your product should relate *broadly* to the theme of local wetlands but that obviously connects to many, many other issues or topics.

*Remember you will also volunteer during their spring visit to the wetlands so you will get some experience with these classes.*